

HTML Tutorial – (HTML5 Compliant)

1.0 HTML Introduction

HTML Example

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>

<p>My first paragraph.</p>

</body>
</html>
```

Explanation

The DOCTYPE declaration defines the Document Type

- The text between `<html>` and `</html>` describes the Web Page
- The text between `<body>` and `</body>` is the visible Page Content
- The text between `<h1>` and `</h1>` is displayed as a Heading
- The text between `<p>` and `</p>` is displayed as a Paragraph

What Is HTML?

- HTML is a language for describing web pages.
- HTML stands for Hyper Text Markup Language
- HTML is a markup language
- A markup language is a set of markup tags
- The tags tells the browser how to display the page content

HTML Tags

- HTML markup tags are usually called HTML tags
- HTML tags are keywords (tag names) surrounded by angle brackets like `<html>`
- HTML tags normally come in pairs like `` and ``
- The first tag in a pair is the start tag, the second tag is the end tag
- The end tag is written like the start tag, with a forward slash before the tag name
- Start and end tags are also called opening tags and closing tags

HTML Elements

"HTML tags" and "HTML elements" are often used to describe the same thing.

But strictly speaking, an HTML element is everything between the start tag and the end tag, including the tags:

HTML Element:

```
<p>This is a paragraph.</p>
```

Web Browsers

The purpose of a web browser (such as Google Chrome, Internet Explorer, Firefox, Safari) is to read HTML documents and display them as web pages.

The browser does not display the HTML tags, but uses the tags to determine how the content of the HTML page is to be presented/displayed to the user:

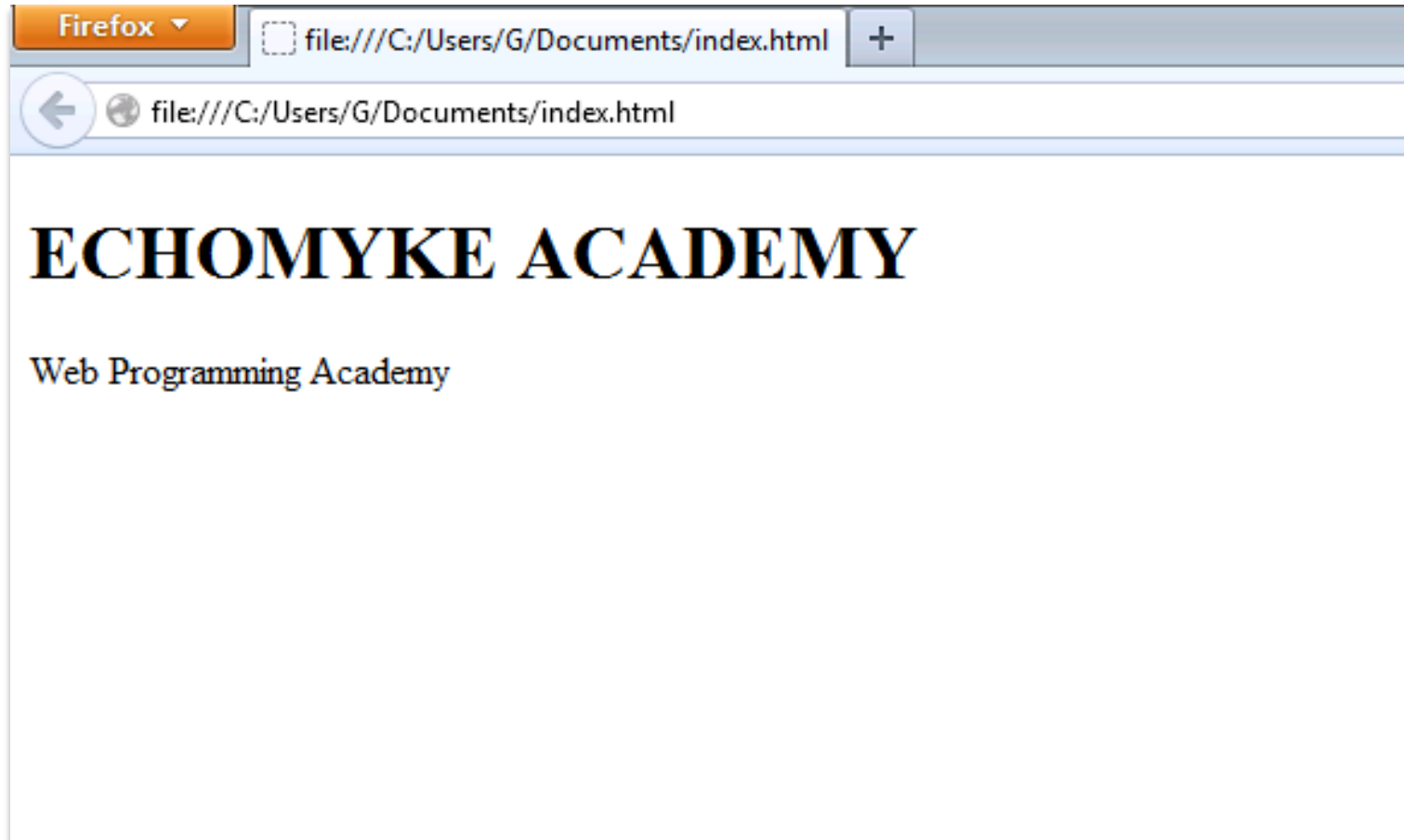
```
<!DOCTYPE html>
<html>
<body>

<h1>ECHOMYKE ACADEMY</h1>

<p>Web Programming Academy.</p>

</body>
</html>
```

Result



Visualization Of A HTML Page Structure

```
<html>
```

```
<body>
```

```
<h1>This a heading</h1>
```

```
<p>This is a paragraph.</p>
```

```
<p>This is another paragraph.</p>
```

```
</body>
```

```
</html>
```

2.0 HTML BASICS

HTML Headings

HTML headings are defined with the `<h1>` to `<h6>` tags.

Example

```
<h1>This is a heading</h1>
```

```
<h2>This is a heading</h2>
```

```
<h3>This is a heading</h3>
```

HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag.

Example

```
<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>
```

HTML Links

HTML links are defined with the `<a>` tag.

Example

```
<a href="http://www.google.com">This is a link</a>
```

HTML Images

HTML images are defined with the tag.

Example

```

```

3.0 HTML ELEMENTS

HTML Elements

An Html Element Is Everything From The Start Tag To The End Tag:

Start tag *	Element content	End tag *
<code><p></code>	This is a paragraph	<code></p></code>
<code></code>	This is a link	<code></code>
<code>
</code>		

* The start tag is often called the **opening tag**. The end tag is often called the **closing tag**.

HTML Element Syntax

- An HTML element starts with a start tag / opening tag
- An HTML element ends with an end tag / closing tag
- The element content is everything between the start and the end tag
- Some HTML elements have empty content
- Empty elements are closed in the start tag
- Most HTML elements can have attributes

Nested HTML Elements

Most HTML elements can be nested (can contain other HTML elements).

HTML documents consist of nested HTML elements.

HTML Document Example

```
<!DOCTYPE html>
<html>

<body>
<p>This is my first paragraph.</p>
</body>

</html>
```

The example above contains 3 HTML elements.

HTML Example Explained

The <p> element:

```
<p>This is my first paragraph.</p>
```

The <p> element defines a paragraph in the HTML document.

The element has a start tag <p> and an end tag </p>.

The element content is: This is my first paragraph.

HTML Example Explained Cont.

The <body> element:

```
<body>  
<p>This is my first paragraph.</p>  
</body>
```

The <body> element defines the body of the HTML document.

The element has a start tag <body> and an end tag </body>.

The element content is another HTML element (a p element).

HTML Example Explained Cont.

The <html> element:

```
<html>  
  
<body>  
<p>This is my first paragraph.</p>  
</body>  
  
</html>
```

The <html> element defines the whole HTML document. The element has a start tag <html> and an end tag </html>. The element content is another HTML element (the body element).

Important To Note!

Don't Forget the End Tag

Some HTML elements might display correctly even if you forget the end tag:

```
<p>This is a paragraph  
<p>This is a paragraph
```

The example above works in most browsers, because the closing tag is considered optional.

Never rely on this. Many HTML elements will produce unexpected results and/or errors if you forget the end tag .

Empty HTML Elements

HTML elements with no content are called empty elements.

`
` is an empty element without a closing tag (the `
` tag defines a line break).

HTML Tip: Use Lowercase Tags

HTML tags are not case sensitive: <P> means the same as <p>. Many web sites use uppercase HTML tags.

Note: We advise to always use lowercase

4.0 HTML ATTRIBUTES

HTML Attributes:

Attributes Provide Additional Information About HTML Elements.

HTML Attributes

- HTML elements can have attributes
- Attributes provide additional information about an element
- Attributes are always specified in the start tag
- Attributes come in name/value pairs like: name="value"

Example of an Attribute

HTML links are defined with the `<a>` tag. The link address is specified in the **href attribute**:

Try this Example

```
<a href="http://www.google.com">This is a link</a>
```

Always Quote Attribute Values

Attribute values should always be enclosed in quotes.

name="value"

Double style quotes are the most common, but single style quotes are also allowed.

name='value'

In some rare situations, when the attribute value itself contains quotes, it is necessary to use single quotes: name='Delete "ShotGun" Dickson'

NOTE: Attribute names and attribute values are case-insensitive.

HTML Attributes Reference

Some attributes that can be used on any HTML element:

Attribute	Description
class	Specifies one or more classnames for an element (refers to a class in a style sheet)
id	Specifies a unique id for an element
style	Specifies an inline CSS style for an element
title	Specifies extra information about an element (displayed as a tool tip)

5.0 HTML HEADINGS

HTML Headings

Headings are defined with the <h1> to <h6> tags.

<h1> defines the most important heading. <h6> defines the least important heading.

Try this Example:

```
<h1>This is a heading</h1>  
<h2>This is a heading</h2>  
<h3>This is a heading</h3>
```

How To Use Html Headings

Use HTML headings for headings only. Don't use headings to make text BIG or bold.

Search engines use your headings to index the structure and content of your web pages.

Since users may skim your pages by its headings, it is important to use headings to show the document structure.

H1 headings should be used as main headings, followed by H2 headings, then the less important H3 headings, and so on.

HTML Lines

The `<hr>` tag creates a horizontal line in an HTML page.

The `hr` element can be used to separate content:

Try this Example:

```
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
```

HTML Comments

Comments can be inserted into the HTML code to make it more readable and understandable. Comments are ignored by the browser and are not displayed.

Comments are written like this:

```
<!-- This is a comment -->
```

Try it out

EXERCISE: Run The Following Codes For Different Headings

```
<!DOCTYPE html>

<html>

<body>


<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>


</body>

</html>
```

EXERCISE 2: Run The Following Codes For Hidden Comments

```
<!DOCTYPE html>

<html>

<body>

<!--This comment will not be displayed-->

<p>This is a regular paragraph</p>

</body>

</html>
```

EXERCISE 3: Run The Following Codes For Horizontal Rule

```
<!DOCTYPE html>
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
<hr>
<p>This is a paragraph.</p>
</body>
</html>
```

6.0 HTML TEXT FORMATTING

HTML Formatting Tags

HTML uses tags like `` and `<i>` for formatting output, like bold or *italic* text.

Example:

```
<!DOCTYPE html>
<html>
<body>

<p><b>This text is bold</b></p>
<p><strong>This text is strong</strong></p>
<p><i>This text is italic</i></p>
<p><em>This text is emphasized</em></p>
<p><code>This is computer output</code></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

</body>
</html>
```

Preformatted Text

Example: How to formatted code for an Address

```
<!DOCTYPE html>

<html>

<body>

<address>

Written by Echomyke Academy.com<br>
<a href="mailto:info@example.org">Email us</a><br>
Address: P.O Box 234 Lagos<br>
Phone: +234-705-534-0422

</address>

</body>

</html>
```


Abbreviations And Acronyms

How to handle abbreviations and acronyms.

Example:

```
<!DOCTYPE html>
<html>
<body>

<p>The <abbr title="World Health Organization">WHO</abbr> was
founded in 1948.</p>
<p>Can I get this <abbr title="as soon as
possible">ASAP</abbr>?</p>

<p>The title attribute is used to show the spelled-out version
when holding the mouse pointer over the acronym or
abbreviation.</p>

</body>
</html>
```

QUOTATIONS

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>The &lt;blockquote> tag</h2>
```

```
<p>The &lt;blockquote> tag specifies a section that is quoted from  
another source.</p>
```

```
<p>Here is a quote from WWF's website:</p>
```

```
<blockquote cite="http://www.worldwildlife.org/who/index.html">
```

```
For 50 years, WWF has been protecting the future of nature. The  
world's leading conservation organization, WWF works in 100 countries  
and is supported by 1.2 million members in the United States and  
close to 5 million globally.
```

```
</blockquote>
```

```
<p><b>Note:</b> Browsers usually indent &lt;blockquote>  
elements.</p>
```

```
<h2>The &lt;q> tag</h2>
```

```
<p>The &lt;q> tag defines a short quotation.</p>
```

Deleted And Inserted

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<p>My favorite color is <del>blue</del> <ins>red</ins>!</p>
```

```
<p>Notice that browsers will strikethrough deleted text and  
underline inserted text.</p>
```

```
</body>
```

```
</html>
```

HTML Text Formatting Tags

Tag	Description
	Defines bold text
	Defines emphasized text
<i>	Defines a part of text in an alternate voice or mood
<small>	Defines smaller text
	Defines important text
<sub>	Defines subscripted text
<sup>	Defines superscripted text
<ins>	Defines inserted text
	Defines deleted text

HTML Citations, Quotations, And Definition Tags

Tag	Description
<abbr>	Defines an abbreviation or acronym
<address>	Defines contact information for the author/owner of a document
<bdo>	Defines the text direction
<blockquote>	Defines a section that is quoted from another source
<q>	Defines an inline (short) quotation

7.0 HTML LINKS

How To Link

Links allow YOU to click or link from page to page:

Example:

```
<!DOCTYPE html>
<html>
<body>

<p>
<a href=http://localhost/example/class.html">HTML Tutorial</a>
This is a link to a page on this website.
</p>

<p>
<a href="http://www.facebook.com/">Facebook</a> This is a link
to a website on the World Wide Web.
</p>

</body>
</html>
```

HTML Hyperlinks (Links)

The HTML `<a>` tag defines a hyperlink.

A hyperlink (or link) is a word, group of words, or image that you can click on to jump to another document.

When you move the cursor over a link in a Web page, the arrow will turn into a little hand.

The most important attribute of the `<a>` element is the `href` attribute, which indicates the link's destination.

By default, links will appear as follows in all browsers:

- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

HTML Link Syntax

The HTML code for a link is simple. It looks like this:

```
<a href="url">Link text</a>
```

The href attribute specifies the destination of a link.

Example:

```
<a href="http://www.echomyketechnologies.com/">Visit  
Echomyke</a>
```

which will display like this: [Visit Echomyke](http://www.echomyketechnologies.com/)

Clicking on this hyperlink will send the user to Echomyke's homepage.

Remember: The "*Link text*" doesn't have to be a text. It can be an image or any other HTML element.

HTML Links - The Target Attribute

The target attribute specifies where to open the linked document.

The example below will open the linked document in a new browser window or a new tab:

```
<a href="http://www.google.com/" target="_blank">Visit  
Google!</a>
```

HTML Links - The Id Attribute

The id attribute can be used to create a bookmark inside an HTML document.

Tip: Bookmarks are not displayed in any special way. They are invisible to the reader.

Example

An anchor with an id inside an HTML document:

```
<a id="tips">Useful Tips Section</a>
```

Create a link to the "Useful Tips Section" inside the same document

```
<a href="#tips">Visit the Useful Tips Section</a>
```

Or, create a link to the "Useful Tips Section" from another page:

```
<a href="http://localhost/example/class.html#tips">  
Visit the Useful Tips Section</a>
```

Exercise

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<p>Create a link of an image:
```

```
<a href="class.html">
```

```
</a></p>
```

```
<p>No border around the image, but still a link:
```

```
<a href="class.html">
```

```
</a></p>
```

```
</body>
```

```
</html>
```

8.0 HTML <Head>

<title> - Define A Title For An HTML Document

Use the <title> tag to define a title for a document.

Example:

```
<!DOCTYPE html>

<html>

<head>

<title>My first HTML page</title>

</head>


<body>

<p>The content of the body element is displayed in the browser.</p>

<p>The content of the title element is displayed in the browser's
title.</p>

</body>


</html>
```

<meta> - Provide Metadata For An HTML Document

Use <meta> elements to specify a description, keywords, author, and character set of a document.

```
<!DOCTYPE html>

<html>

<head>

<meta name="description" content="Web Programming tutorials">

<meta name="keywords" content="HTML,CSS,JavaScript">

<meta name="author" content="Echomyke Academy">

<meta charset="UTF-8">

</head>

<body>

<p>All meta information goes in the head section...</p>

</body>

</html>
```

The HTML `<Head>` Element

The `<head>` element is a container for all the head elements. Elements inside `<head>` can include scripts, instruct the browser where to find style sheets, provide meta information, and more.

The following tags can be added to the head section: `<title>`, `<style>`, `<meta>`, `<link>`, `<script>`, `<noscript>`, and `<base>`.

The HTML `<title>` Element

The `<title>` tag defines the Title of the document.

The `<title>` element is required in all HTML/XHTML documents.

The `<title>` element:

- defines a title in the browser toolbar
- provides a title for the page when it is added to favorites
- displays a title for the page in search-engine results

Example

```
<!DOCTYPE html>
<html>
<head>
<title>Title of the document</title>
</head>

<body>
The content of the document.....
</body>

</html>
```

The HTML `<link>` Element

The `<link>` tag defines the relationship between a document and an external resource.

The `<link>` tag is most used to link to style sheets:

```
<head>
<link rel="stylesheet" type="text/css"
href="mystyle.css">
</head>
```

The HTML `<style>` Element

The `<style>` tag is used to define style information for an HTML document.

Inside the `<style>` element you specify how HTML elements should render in a browser:

```
<head>
<style type="text/css">
body {background-color:yellow}
p {color:blue}
</style>
</head>
```

The HTML `<meta>` Element

Metadata is data (information) about data.

The `<meta>` tag provides metadata about the HTML document.

Metadata will not be displayed on the page, but will be machine parsable.

Meta elements are typically used to specify page description, keywords, author of the document, last modified, and other metadata.

The metadata can be used by browsers (how to display content or reload page), search engines (keywords), or other web services.

`<meta>` tags always goes inside the `<head>` element.

Different Use of <meta> Tags

Define keywords for search engines:

```
<meta name="keywords" content="HTML, CSS, XHTML, JavaScript">
```

Define a description of your web page:

```
<meta name="description" content="Web Programming Tutorials">
```

Define the author of a page:

```
<meta name="author" content="Echomyke Academy">
```

Refresh document every 30 seconds:

```
<meta http-equiv="refresh" content="30">
```

The Html `<script>` Element

The `<script>` tag is used to define a client-side script, such as a JavaScript.

The `<script>` element will be explained in details later in the lecture.

Summary of HTML head Elements

Tag	Description
<head>	Defines information about the document
<title>	Defines the title of a document
<base>	Defines a default address or a default target for all links on a page
<link>	Defines the relationship between a document and an external resource
<meta>	Defines metadata about an HTML document
<script>	Defines a client-side script
<style>	Defines style information for a document

9.0 HTML STYLES - CSS

Example

```
<!DOCTYPE html>

<html>

<head>

<style type="text/css">

h1 {color:red;}

h2 {color:blue;}

p {color:green;}

</style>

</head>

<body>

<h1>All header 1 elements will be red</h1>

<h2>All header 2 elements will be blue</h2>

<p>All text in paragraphs will be green.</p>

</body>

</html>
```

Styling HTML With CSS

CSS (Cascading Style Sheets) is used to style HTML elements.

CSS can be added to HTML in the following ways:

- Inline - using the style attribute in HTML elements
- Internal - using the `<style>` element in the `<head>` section
- External - using an external CSS file

The preferred way to add CSS to HTML, is to put CSS syntax in separate CSS files.

However, in this HTML tutorial we will introduce you to CSS using the style attribute. This is done to simplify the examples. It also makes it easier for you to edit the code and try it yourself.

CSS Can Be Added To HTML In The Following Ways

1. Inline Styles

```
<p style="color:blue;margin-left:20px;">This is a paragraph.</p>
```

An inline style can be used if a unique style is to be applied to one single occurrence of an element.

To use inline styles, use the style attribute in the relevant tag. The style attribute can contain any CSS property. The example above shows how to change the text color and the left margin of a paragraph:

Example of Inline style – Background Color

The background-color property defines the background color for an element:

```
<!DOCTYPE html>
<html>

<body style="background-color:yellow;">
<h2 style="background-color:red;">This is a
heading</h2>
<p style="background-color:green;">This is a
paragraph.</p>
</body>

</html>
```

Example of Inline style – Font, Color & Size

The font-family, color, and font-size properties defines the font, color, and size of the text in an element:

```
<!DOCTYPE html>
<html>

<body>
<h1 style="font-family:verdana;">A heading</h1>
<p style="font-family:arial;color:red;font-size:20px;">A paragraph.</p>
</body>

</html>
```

Example of Inline style – Text Alignment

The text-align property specifies the horizontal alignment of text in an element:

```
<!DOCTYPE html>
<html>

<body>
<h1 style="text-align:center;">Center-aligned
heading</h1>
<p>This is a paragraph.</p>
</body>

</html>
```

Second Way CSS Can Be Added To HTML

2. Internal Style Sheet

An internal style sheet can be used if one single document has a unique style. Internal styles are defined in the <head> section of an HTML page, by using the <style> tag,

Example:

```
<head>
<style type="text/css">
body {background-color:yellow;}
p {color:blue;}
</style>
</head>
```


Third Way CSS Can Be Added To HTML

3. External Style Sheet

An external style sheet is ideal when the style is applied to many pages. With an external style sheet, you can change the look of an entire Web site by changing one file. Each page must link to the style sheet using the <link> tag. The <link> tag goes inside the <head> section:

```
<head>
<link rel="stylesheet" type="text/css"
href="mystyle.css">
</head>
```

Exercise

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<a href="http://www.google.com" style="text-decoration:none;">Visit google.com!</a>
```

```
</body>
```

```
</html>
```

HTML Style Tags

Tag	Description
<style>	Defines style information for a document
<link>	Defines the relationship between a document and an external resource

10. HTML IMAGES

The `` Tag And The Src Attribute

In HTML, images are defined with the `` tag.

The `` tag is empty, which means that it contains attributes only, and has no closing tag.

To display an image on a page, you need to use the `src` attribute.

`Src` stands for "source".

The value of the `src` attribute is the URL of the image you want to display.

Syntax For Defining An Image:

```

```

The URL points to the location where the image is stored. An image named "box_loader.gif", located in the "images" directory on "localhost" has the URL:

http://localhost/img/css/box_loader.gif.

The browser displays the image where the tag occurs in the document. If you put an image tag between two paragraphs, the browser shows the first paragraph, then the image, and then the second paragraph.

The Alt Attribute

The required alt attribute specifies an alternate text for an image, if the image cannot be displayed.

The value of the alt attribute is an author-defined text:

```

```

Height And Width Of An Image

The height and width attributes are used to specify the height and width of an image.

The attribute values are specified in pixels by default:

```

```


Question

Why is it important to specify the height and width attribute for an image?

Answer

If these attributes are set, the space required for the image is reserved when the page is loaded.

However, without these attributes, the browser does not know the size of the image. The effect will be that the page layout will change while the images load.

Important note

Make sure that the images actually stay in the same spot in relation to the web page, otherwise your visitors will get a broken link icon. The broken link icon is shown if the browser cannot find the image.

Exercise

```
<!DOCTYPE html>

<html>

<body>


<p>An image from another folder:</p>

<p>An image from My Localhost:</p>


</body>

</html>
```

Exercise

```
<!DOCTYPE html>

<html>

<body>


<p>

 A paragraph with an image. The image will
      float to the left of this text.

</p>


<p>

 A paragraph with an image. The image will
      float to the right of this text.

</p>


</body>

</html>
```

HTML Tables

Tables are defined with the `<table>` tag.

A table is divided into rows (with the `<tr>` tag), and each row is divided into data cells (with the `<td>` tag). `td` stands for "table data," and holds the content of a data cell. A `<td>` tag can contain text, links, images, lists, forms, other tables, etc.

Example

```
<table border="1">  
  <tr>  
    <td>row 1, cell 1</td>  
    <td>row 1, cell 2</td>  
  </tr>  
  <tr>  
    <td>row 2, cell 1</td>  
    <td>row 2, cell 2</td>  
  </tr>  
</table>
```

HTML Tables And The Border Attribute

If you do not specify a border attribute, the table will be displayed without borders. Sometimes this can be useful, but most of the time, we want the borders to show.

To display a table with borders, specify the border attribute:

```
<table border="1">
<tr>
<td>Row 1, cell 1</td>
<td>Row 1, cell 2</td>
</tr>
</table>
```


HTML Table Headers

Header information in a table are defined with the <th> tag.

All major browsers display the text in the <th> element as bold and centered.

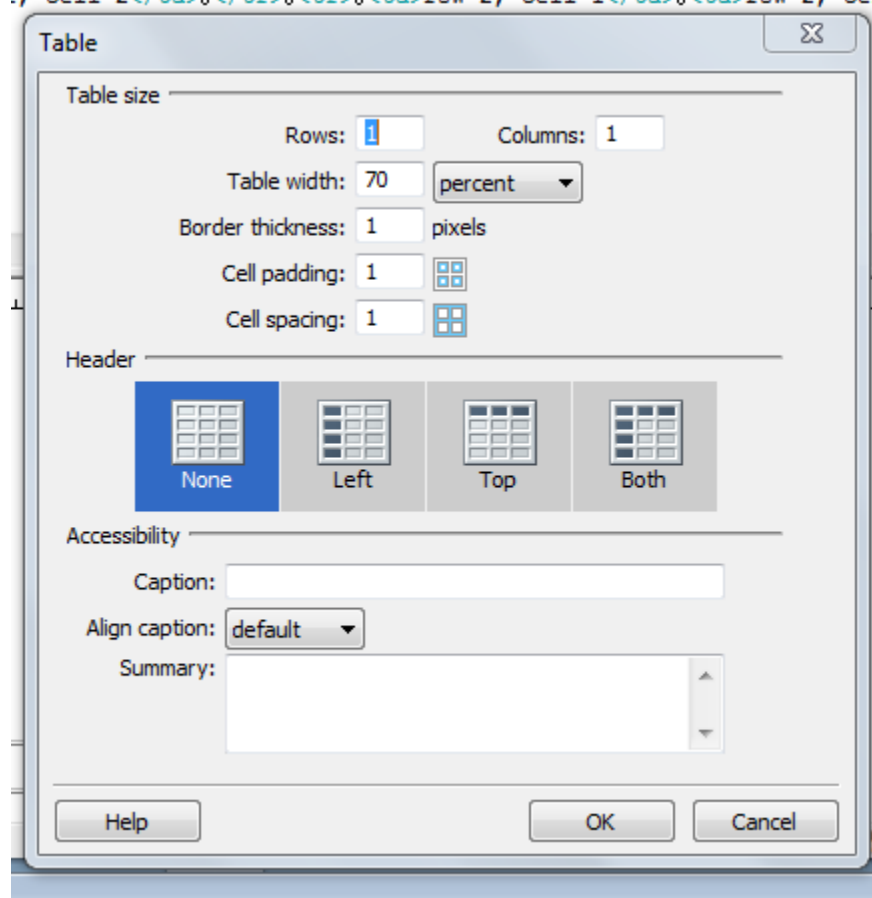
Example

```
<table border="1">
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
<tr>
<td>row 1, cell 1</td>
<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>
```

Short Method

On the Dreamweaver page, Click the Insert Tab, then click Table.

INSERT=→TABLE



11. HTML LISTS

HTML Lists

The most common HTML lists are ordered and unordered lists:

An ordered list:

- 1.The first list item
- 2.The second list item
- 3.The third list item

An unordered list:

- List item
- List item
- List item

HTML Unordered Lists

An unordered list starts with the `` tag. Each list item starts with the `` tag.

The list items are marked with bullets (typically small black circles).

```
<ul>
<li>Obama</li>
<li>Jonathan</li>
</ul>
```

Example

```
<!DOCTYPE html>
<html>
<body>

<h4>List of Past Presidents :</h4>
<ul>
  <li>OBJ</li>
  <li>YAR' DUA</li>
  <li>JONATHAN</li>
</ul>

</body>
</html>
```

HTML Ordered Lists

An ordered list starts with the `` tag. Each list item starts with the `` tag.

The list items are marked with numbers.

```
<ol>  
<li>100 Level</li>  
<li>200 Level</li>  
</ol>
```

Example

```
<!DOCTYPE html>
<html>
<body>

<h4>List of Past Presidents :</h4>
<ul>
  <li>OBJ</li>
  <li>YAR' DUA</li>
  <li>JONATHAN</li>
</ul>

</body>
</html>
```


Types Of Unordered Lists

Disc Type

```
<h4>Disc bullets list:</h4>
```

```
<ul style="list-style-type:disc">
```

```
<li>John</li>
```

```
<li>James</li>
```

```
<li>Jonah</li>
```

```
<li>Johnson</li>
```

```
</ul>
```

```
<h4>Disc bullets list:</h4>
```

```
<ul style="list-style-type:circle">
```

```
<li>John</li>
```

```
<li>James</li>
```

```
<li>Jonah</li>
```

```
<li>Johnson</li>
```

```
</ul>
```

Square Type

```
<h4>Square bullets list:</h4>

<ul style="list-style-type:square">

  <li>John</li>

  <li>James</li>

  <li>Jonah</li>

  <li>Johnson</li>

</ul>
```

Types Of Ordered Lists

Capital Letter

```
<h4>Letters list:</h4>
```

```
<ol type="A">
```

```
  <li>Jane</li>
```

```
  <li>Jenifer</li>
```

```
  <li>Justina</li>
```

```
  <li>Jessica</li>
```

```
</ol>
```

Lowercase Letters

```
<h4>Lowercase letters list:</h4>
```

```
<ol type="a">
```

```
  <li>Apples</li>
```

```
  <li>Bananas</li>
```

```
  <li>Lemons</li>
```

```
  <li>Oranges</li>
```

```
</ol>
```

Roman Numbers

```
<h4>Roman numbers list:</h4>
```

```
<ol type="I">
```

```
  <li>Apples</li>
```

```
  <li>Bananas</li>
```

```
  <li>Lemons</li>
```

```
  <li>Oranges</li>
```

```
</ol>
```


Lowercase Roman Numbers

```
<h4>Lowercase Roman numbers list:</h4>
```

```
<ol type="i">
```

```
  <li>Apples</li>
```

```
  <li>Bananas</li>
```

```
  <li>Lemons</li>
```

```
  <li>Oranges</li>
```

```
</ol>
```

How To Nest Lists

```
<h4>Basic Amenities:</h4>
```

```
<ul>
```

```
  <li>Shelter</li>
```

```
  <li>Food
```

```
    <ul>
```

```
      <li>Garri</li>
```

```
      <li>Rice</li>
```

```
    </ul>
```

```
  </li>
```

```
  <li>Clothing</li>
```

```
</ul>
```

Nested Example

```
<h4>Basic Amenities:</h4>
```

```
<ul>
```

```
  <li>Shelter</li>
```

```
  <li>Food
```

```
    <ul>
```

```
      <li>Garri</li>
```

```
      <li>Rice
```

```
        <ul>
```

```
          <li>Ofada</li>
```

```
          <li>Imported</li>
```

```
        </ul>
```

```
      </li>
```

```
    </ul>
```

```
  </li>
```

```
  <li>Clothing</li>
```

```
</ul>
```

HTML Description Lists

A description list is a list of terms/names, with a description of each term/name.

The `<dl>` tag defines a description list.

The `<dl>` tag is used in conjunction with `<dt>` (defines terms/names) and `<dd>` (describes each term/name):

```
<dl>
<dt>Students</dt>
<dd>- male or female</dd>
<dt>Pastors</dt>
<dd>- Rich or Poor</dd>
</dl>
```

HTML List Tags

Tag	Description
	Defines an ordered list
	Defines an unordered list
	Defines a list item
<dl>	Defines a description list
<dt>	Defines a term/name in a description list
<dd>	Defines a description of a term/name in a description list

12. HTML <Div> And

HTML Block Elements

- Most HTML elements are defined as block level elements or as inline elements.
- Block level elements normally start (and end) with a new line when displayed in a browser.

Examples: `<h1>`, `<p>`, ``, `<table>`

HTML Inline Elements

- Inline elements are normally displayed without starting a new line.

Examples: ``, `<td>`, `<a>`, ``

The HTML `<div>` Element

- The HTML `<div>` element is a block level element that can be used as a container for grouping other HTML elements.
- The `<div>` element has no special meaning. Except that, because it is a block level element, the browser will display a line break before and after it.
- When used together with CSS, the `<div>` element can be used to set style attributes to large blocks of content.
- Another common use of the `<div>` element, is for document layout. It replaces the "old way" of defining layout using tables. Using `<table>` elements for layout is not the correct use of `<table>`. The purpose of the `<table>` element is to display tabular data.

Styling A Div

```
<div style="color:#0000FF">  
  <h3>This is a heading</h3>  
  <p>This is a paragraph.</p>  
</div>
```

The HTML `` Element

- The HTML `` element is an inline element that can be used as a container for text.
- The `` element has no special meaning.
- When used together with CSS, the `` element can be used to set style attributes to parts of the text.

Example

```
<p>I will buy a <span style="color:blue;font-weight:bold">blue</span> Ferrari next Month and  
a <span style="color:darkolivegreen;font-weight:bold">dark green</span> Bugatti.</p>
```

13. HTML LAYOUTS

Layout Example Using <div> elements

```
<div id="container" style="width:500px;">

<div id="header" style="background-color:#FF0000;">
<h1 style="margin-bottom:0;">Welcome To My Home Page</h1></div>

<div id="menu" style="background-color:
    #66CCFF;height:200px;width:100px;float:left;">
<b>Menu</b><br>
HTML<br>
CSS<br>
JavaScript</div>

<div id="content" style="background-
    color:#EEEEEE;height:200px;width:400px;float:left;">
Content of the Website goes here</div>

<div id="footer" style="background-color:#FF0000;clear:both;text-
    align:center;">
Copyright © mywebsite.com</div>
```

Welcome To My Home Page

Menu

HTML

CSS

JavaScript

Content of the Website goes here

Copyright Â© mywebsite.com

Layout Example Using <table> elements

```
<table width="500" border="0">

<tr>

<td colspan="2" style="background-color:#FFA500;">
<h1>Main Title of Web Page</h1>
</td>
</tr>

<tr>

<td style="background-color:#FFD700;width:100px;">
<b>Menu</b><br>
HTML<br>
CSS<br>
JavaScript
</td>

<td style="background-color:#eeeeee;height:200px;width:400px;">
Content goes here</td>
</tr>

<tr>

<td colspan="2" style="background-color:#FFA500;text-align:center;">
Copyright © yourwebsite.com</td>
</tr>

</table>
```


HTML FORMS AND INPUT

HTML Forms

HTML forms are used to pass data to a server.

An HTML form can contain input elements like text fields, checkboxes, radio-buttons, submit buttons and more. A form can also contain select lists, textarea, fieldset, legend, and label elements.

HTML Form tag <form>

The <form> tag is used to create an HTML form:

```
<!DOCTYPE html>
<html>
<body>

<form>
.
  input elements
.
</form>

</body>
</html>
```

Note: The default width of a text field is 20 characters.

HTML Forms - The Input Element

The most important form element is the `<input>` element.

The `<input>` element is used to select user information.

An `<input>` element can vary in many ways, depending on the type attribute. An `<input>` element can be of type text field, checkbox, password, radio button, submit button, and more.

Text Fields

`<input type="text">` defines a one-line input field that a user can enter text into:

```
<form>
First name: <input type="text" name="firstname"><br>
Last name: <input type="text" name="lastname">
</form>
```

Password Field

`<input type="password">` defines a password field:

```
<form>  
Password: <input type="password" name="pwd">  
</form>
```

Radio Buttons

`<input type="radio">` defines a radio button. Radio buttons let a user select ONLY ONE of a limited number of choices:

```
<form>
Male <input type="radio" name="sex" value="male"><br>
Female <input type="radio" name="sex" value="female">
</form>
```

Checkboxes

`<input type="checkbox">` defines a checkbox. Checkboxes let a user select options of a limited number of choices.

```
<form>
  Novice <input type="checkbox" name="knowledge"
value="novice"><br>
Expert<input type="checkbox" name="Knowledge"
value="Expert">
</form>
```


Submit Button

`<input type="submit">` defines a submit button.

A submit button is used to send form data to a server. The data is sent to the page specified in the form's action attribute. The file defined in the action attribute usually does something with the received input:

```
<form name="input" action="html_form_action.asp"
method="post">
Username: <input type="text" name="user">
<input type="submit" value="Submit">
</form>
```

Drop down list

```
<!DOCTYPE html>
<html>
<body>

<form action="">
<label>State of Origin</label>
<select name="state">
<option value="select">Select Option</option>
<option value="Edo">Edo</option>
<option value="Rivers">Rivers</option>
<option value="Lagos">Lagos</option>
<option value="Benue">Benue</option>
</select>
</form>
</body>
</html>
```

Drop down list 2

```
<!DOCTYPE html>
<html>
<body>

<form action="">
<label>Types of Classes</label>
<select>
<option value="Select">Select Class</option>
  <optgroup label="Beginners Class">
    <option value="html">HTML</option>
    <option value="css">CSS</option>
  </optgroup>
  <optgroup label="Advance Class">
    <option value="asp">ASP.NET</option>
    <option value="mobile">MOBILE APPS</option>
  </optgroup>
</select> </form>
</body>
</html>
```

Creating a button

```
<!DOCTYPE html>
<html>
<body>

<form action="">
<label>State of Origin</label>
<select name="state">
<option value="select">Select Option</option>
<option value="Edo">Edo</option>
<option value="Rivers">Rivers</option>
<option value="Lagos">Lagos</option>
<option value="Benue">Benue</option>
<input type="button" value="Submit">
</select>
</form>
</body>
</html>
```

Creating a Textarea

```
<!DOCTYPE html>
<html>
<body>

<form action="">
<input type="button" value="Submit">
<textarea></textarea>
</form>
</body>
</html>
```

Creating a Field set

```
<!DOCTYPE html>
<html>
<body>

<form action="">
<fieldset>
<legend>Provide your details below:</legend><br>
Name: <input type="text" size="30"><br><br>
E-mail: <input type="text" size="30"><br><br>
Phone Number: <input type="text" size="30">
</fieldset>
</form>

</body>
</html>
```

HTML Form Tags

Tag	Description
<form>	Defines an HTML form for user input
<input>	Defines an input control
<textarea>	Defines a multiline input control (text area)
<label>	Defines a label for an <input> element
<fieldset>	Groups related elements in a form
<legend>	Defines a caption for a <fieldset> element
<select>	Defines a drop-down list
<optgroup>	Defines a group of related options in a drop-down list
<option>	Defines an option in a drop-down list
<button>	Defines a clickable button